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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,022	01/23/2004	Randy Runyan	6006-0163-1	8954

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EXAMINER	
BLAKE, CAROLYN T	

ART UNIT	PAPER NUMBER
3724	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/764,022	RUNYAN ET AL.	
	Examiner	Art Unit	
	Carolyn T Blake	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 January 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the threaded adjustment assembly must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

2. All features should be referenced using numbers, not words. Accordingly, all words should be deleted from the drawings (FIGS 1, 2 and 4).

3. The drawings are difficult to view as provided. Formal drawings are required with applicant's next response.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following:

- Paragraph 17, line 5: reference character "12" should be changed to - -14- -.
- Paragraph 17, line 6: reference character "16" should be changed to - -14- -.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 6, 8, 10, 11, 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Savory (3,242,714) in view of Acker (3,500,220).

Concerning claims 1, 10, and 11, Savory discloses a cutoff apparatus (FIGS 1-8), comprising a blade (20 and col.1, line 15) and an actuator (cylinders 13A and 13B). The actuator is operatively connected to the blade for selectively moving the blade in a rectilinear direction. A cutting block (19) is disposed adjacent the blade (20) and is selectively movable so as to position differing areas of the cutting block (19) in opposition to the blade (20). Savory fails to disclose a depth control mechanism. Acker discloses a cutoff apparatus with a depth control mechanism (threaded assembly 102) for selectively controlling the degree of movement of the blade (22) toward the cutting

block (64). Acker discloses the depth control mechanism (102) allows for adjustability and varies the depth of blade penetration (col. 4, lines 26-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a threaded depth control mechanism as an additional aid in adjusting height, as disclosed by Acker, on the Savory device in order to vary the depth of blade penetration.

Regarding claims 6 and 16, Savory discloses a releasable mounting system for releasably securing the cutting block (19) in opposition to the blade (20). Note the screws securing the cutting block (19) in FIG 2.

Regarding claims 8 and 18, Savory discloses the blade (20) is fixed to a blade holder (11) having a planar control surface defined on a distal end thereof (FIG 1). Acker discloses a cutoff apparatus with a depth control mechanism (threaded assembly 102) that includes a threaded adjustment assembly (104) having a planar stop (top of 102) positioned thereon. The stop controls the degree of movement of the blade (col. 3, lines 73-75).

Regarding claim 20, Savory discloses a method for cutting comprising the steps of operatively connecting an actuator (13A and 13B) to a blade (20) for selectively moving the blade in a rectilinear direction. Savory discloses disposing a cutting block (19) adjacent the blade (20). The cutting block (19) is positioned off-center with respect to a plane defined by the blade's rectilinear movement. Operation of the actuator (13A and 13B) selectively causes the blade (20) to move in the rectilinear direction thereby impacting a material. Savory fails to disclose a depth control mechanism. However,

Acker discloses positioning a depth control mechanism (102) for selectively controlling a degree of movement of the blade (22).

8. Claims 2, 4, 5, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Savory in view of Acker as applied to claims 1, 10, and 11 above, and further in view of Prentice (3,975,976).

Regarding claims 2 and 12, Savory in view of Acker fails to disclose the specific material choice of the cutting block. Prentice discloses the cutting block is made from urethane (col. 3, lines 16-18). The material is resilient in order to preserve the sharp edge of the blade (col. 1, lines 14-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use urethane, as disclosed by Prentice, on the Savory and Acker cutting block in order to preserve the sharp edge of the blade.

Regarding claims 4 and 14, Savory in view of Acker fails to disclose the cutting block is selectively shiftable in a direction substantially perpendicular to the rectilinear direction. Prentice discloses a cutting block (14) that is selectively shiftable in a direction substantially perpendicular to the rectilinear direction, thus altering an impact line of the blade (10) upon the cutting surface. See col. 7, lines 11-20. This adjustability allows full use of the cutting block surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a cutting block that is perpendicularly shiftable, as disclosed by Prentice, on the Savory and Acker device in order to fully use the cutting block surface.

Regarding claims 5 and 15, Savory discloses the cutting block (19) has two impact surfaces (top and bottom). Savory in view of Acker fails to disclose the cutting block is selectively shiftable about its longitudinal axis. Prentice discloses the cutting block (14) includes two impact surfaces (top and bottom of 14) and is selectively rotatable about its longitudinal axis, thus selectively positioning one of said two impact surfaces in opposition to said blade (Abstract, lines 9-12). Again, this allows for full use of the cutting block surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a cutting block that is selectively rotatable, as disclosed by Prentice, on the Savory in view of Acker device in order to fully use the cutting block surface.

9. Claims 3, 9, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Savory in view of Acker as applied to claims 1, 10, and 11 above, and further in view of Hansen (3,674,405).

Savory discloses an actuator with a pair of cylinders (13A and 13B) operatively disposed on opposing distal ends of the blade (20). Savory fails to disclose the cylinders are pneumatically operated, but instead discloses the cylinders are hydraulically operated. Hansen (3,674,405) teaches hydraulic and pneumatic cylinders can be interchanged. The two types yield similar results without the need for design changes. Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to replaced the hydraulically operated cylinders with pneumatically operated cylinders, as disclosed by Hansen, on the Savory and Acker device because the pneumatically operated cylinders will yield similar results.

Regarding claims 9 and 19, the Savory device inherently includes a quick exhaust valve operatively connected to the cylinders (13A and 13B) for automatically actuating during the rectilinear movement of the blade (20) towards the cutting block (19).

10. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Savory in view of Acker as applied to claims 1, 10, and 11 above, and further in view of Halket et al (6,279,446 B1). Savory in view of Acker fails to disclose the blade is ceramic. However, Halket et al disclose a cutoff apparatus with a ceramic blade (58). A ceramic blade requires as low as half to one third the force of a steel blade for the same cut (col.3, lines 8-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a ceramic blade, as disclosed by Halket et al, with the Savory and Acker device in order to use less force when cutting.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lash et al (4,685,367), Valkanov (5,492,041), Fillion (4,949,611), Lovell (1,308,852), and Farrell, Sr. et al (4,338,839) disclose cutoff apparatuses with blades and actuators that move the blades rectilinearly. Cage (3,901,114) discloses a movable cutting block.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T Blake whose telephone number is (703) 305-0390. The examiner can normally be reached on Monday to Friday, 8:00 AM to 5:30 PM, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N Shoap can be reached on (703) 308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CB
November 15, 2004

Allan N. Shoap
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